

LOG OF MEETING DIRECTORATE FOR ENGINEERING SCIENCES

SUBJECT: UL 8400 STP Meeting on Immersive Technologies

DATE OF MEETING: August 25, 2022, 7:00pm, ET

LOG ENTRY SOURCE: Treye Thomas (EXHR)

DATE OF LOG ENTRY: September 13, 2022

LOCATION: Teleconference

CPSC ATTENDEE(S): Treye Thomas (EXHR) and Stephen Harsanyi (ESHF)

NON-CPSC ATTENDEE(S): Contact UL for the attendee list.

Summary of Meeting:

The standard technical panel (STP) for draft standard UL 8400, *The Proposed First Edition of the Standard for Safety for Virtual Reality, Augmented Reality, and Mixed Reality Technology Equipment*, met to discuss requirements for Virtual Reality (VR), Augmented Reality (AR), and Mixed Reality (MR) products. The STP discussed comments and recommended revisions to the recently balloted first edition of UL 8400 (ballot closed on August 2, 2022).

The STP discussed clauses and related annexes pertaining to the following topics, among others: exposure of eyes to thermal energy, biomechanical stress, mechanical robustness, and enhancing spatial perception. CPSC staff provided recommendations regarding the requirements for these topics. For example, CPSC staff recommended that anthropometric considerations, such as for biomechanical stress (*e.g.*, neck strain), should include intended end user populations for whom 50th percentile male dimensions would afford inadequate protection. CPSC staff also expressed that mechanical robustness should account for users colliding with real world objects with the HMD making contact with the object, such as the corner of a table, while the HMD is still being worn. The STP began discussing safety and warning instructions, but ran out of time in the meeting. CPSC staff explained that it is important for the clause pertaining to safety and warning instructions to incorporate normative requirements, rather than rely almost exclusively on informative recommendations. CPSC staff also requested that the STP discuss further the intended user ages covered by the standard.

Next Steps:

The STP will meet again on September 27, 2022, at 7pm, ET. The STP will continue discussing the comments and recommended revisions on the recent ballot, particularly the clause and annex pertaining to safety and warning instructions.